origin and history of the industrial arts. They have dwelt especially upon primitive conditions with a view to the use of these arts in the teaching of history in the primary grades. This month we shall picture the industrial conditions of primitive people and work out plans for teaching.

In tracing the progress of early man toward civilization, we shall need to make a close study of geographical environment. The students will consider the adaptation of the continent of North America to people in the hunter and agricultural stages of life, and trace effects of different regions upon the aborigines.

References: Payne, *History of America*, vol. 1; Fiske, *Discovery of America*, vol. 1; Winsor, *Narrative and Critical History;* Shaler, *Story of Our Continent;* Shaler, *Nature and Man in America;* Shaler, *United States.*

Art in Connection with History: (JOHN DUNCAN.) The students will make drawings in colored chalk upon large sheets of gray paper to illustrate the lessons which they will by and by give to the children. These drawings will represent weapons and tools, and scenes from primitive life showing the manners, occupations, and fortunes of the hunter, shepherd and farmer. The training class will also mold the simplest forms of pottery and decorate them with raised and with incised designs.

For work in textiles see Miss Mitchell's outline. An outline for the study of pottery in connection with history will appear in February.

Geography

Zonia Baber

Action rather than reflection characterizes children; hence the desire to create should be given scope for its normal realization.

That expression is a potent factor in education is recognized by all thinking teachers; but the value of the various forms of expression, making, modeling, painting, drawing, dramatic action, in their reaction on thought has not been generally appreciated. Language, oral and written, has been almost the only means employed in the expression of the subjects studied in the schools to within recent times. The other modes of expression were either not taught at all or were divorced from the thought content of the subjects of study. In the study of geography, the necessity of making, modeling, drawing, painting, and dramatic action, as well as speech and written language, cannot be ignored. It is in the making of rivers, valleys, sea-cliffs, sand-bars, beaches, sand dunes, etc., in the laboratory that the fullest appreciation of the work of running water, waves, and wind is found.

The making of characteristic costumes and dramatic representation of customs and industries lead to a better understanding of the people of the various countries. The relief of landscape is most easily and accurately represented by modeling, hence this mode of expression should precede the others in the study of the form of a country. Drawing, though more difficult than modeling, is necessary as a graphic representation of form; while color, which is most important in imaging a landscape, demands the use of paints. When the black of the blackboard has been relegated to the limbo of the past, and certain colored boards on which colored crayons may be used with pleasing effects surround the school-room, the accuracy of the

EXPRESSION IN GEOGRAPHY

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CHALK-MODELING

pupil's images of landscapes will be greatly enhanced. Making, modeling, painting, drawing, oral and written expression are used throughout all the grades of the Chicago Institute in teaching geography. (See page 410.)

In the elementary grades, whatever aspect seems most characteristic of the people studied will be dramatized. For instance, the Fourth Grade, in the study of Lake Michigan and sea life, will represent certain aspects of a life-saving station.

The Sixth will represent in costume a street scene in southern India—a school sitting on the ground in the shade of a building, natives weaving at the side of the street, pounding brass, grinding corn, and selling small wares.

The ability of the teacher to draw, paint, and model will enhance immeasurably her power in teaching geography. For this reason, as well as for the closer observation and study which results from the demand for expression, the pedagogic class will be required to express themselves continually in these different modes in order that clearer images and greater skill in expression may be acquired.

Pedagogic Class: During the autumn quarter the pedagogic class have tried to interpret some of the physiographic aspects and human activities of the Chicago region. They visited the places where the best examples of certain earth-shaping processes obtain, as along the north shore for stream and wave work; to Dune Park for wind action; to Stony Island and North Shore for glacier work.

A special visit to a farm, together with the human interests exhibited in all the region, formed a basis for the consideration of man's adaptation to his geographical and social environment.

Besides the blackboard drawings necessitated in the class discussion, the students were requested to illustrate their papers describing the field trips.

The work for the quarter was summed up by lectures given by the students selected by the members of the committees into which the class is divided. The talks were illustrated by drawings, maps, charts, photographs, and by projected pictures. Model lessons were given by Mrs. Atwood to the First Grade and by Miss Van Hoesen to the Fourth Grade, and discussed by the pedagogic class.

The work for the pedagogic class for January will be a study of North America, its topography, climate, geological formation, and its influence on life and the world's civilization.

I. Consideration of North America as a great land mass in form, shape, size, drainage, and relation to the other continents of the globe.

1. Climate: Prevailing winds. Movement of storms in the United States. Distribution of heat. Southern limit of the winter isotherm of 32°. Distribution of rainfall; snowfall. What would be the effect on the climate of North America if the eastern and western highlands had been reversed in position? What would be the effect on the climate of the plain if a high range of mountains crossed the northern country from east to west?

What would be the effect upon this region if the Gulf of Mexico and the Caribbean Sea were land?

2. Western Highlands: Extent, altitude, appearance, and formation of Rocky Mountains, Sierra Madre Mountains, Sierra Nevada Mountains, Coast Range, Mexican Plateau, and Great Basin.

(a) Characteristics of river basin found in the western slope of the great highland mass, Colorado, Sacramento, San Joaquin, Columbia, Fraser, Yukon. What attractions for man does this western highland mass possess? What are the influences, both evil and good, of a desert or semi-desert region on the rest of the continent? For agricultural purposes which is to be preferred, an irrigated region or a region of constant rainfall?

3. Great Central Plain: Extent; elevation; winter and summer appearance; glaciated area; account for lakes; non-glaciated region.

Characteristics of the river basins: Mississippi, Mackenzie, Hudson Bay System.

Value of the great plain in the development of the continent.

Would a different arrangement of lowlands and highlands improve the continent as a home for man?

4. Eastern Highlands: Extent, appearance, geologic formation of (a) Canadian Highlands, (b) Appalachian System: New England Mountains; Blue Ridge; Appalachian Valley; Alleghany Forest; Alleghany Plateau; Piedmont.

Account for the position of Delaware, Susquehanna, Potomac, New, and Tennessee rivers. What is the effect of the Piedmont region on the rivers which cross it?

What is the value of the Appalachian Highlands to the present inhabitants of the United States?

In what way did they aid the colonists? What disadvantage were they to the colonists? What influence did they exert on the Civil War?

(c) Characteristics of St. Lawrence River basin?

5. Coastal Plain: Extent; appearance; formation; agricultural value. What influence did the coastal plain exert on early settlement? On the Civil War?

Materials which will be used in the development of the subject: Relief, physical, contour, geologic maps of North America and United States; geological portfolios; U. S. weather maps; crop bulletins; photographs; projected pictures; charts; diagrams.

References: Mill, *International Geography*, pp. 660-790; *Compendium of North America;* Reclus, *Earth and its Inhabitants;* Shaler, *The United States of America;* Davis, *Physical Geography; National Geographic Monograph;* Willis, *The Northern Appalachians;* Hayes, *The Southern Appalachians;* Davis, *Physical Geography of Southern New England;* Russell, *Rivers of North America;* Russell, *Lakes of North America;* Russell, *Volcanoes of North America.* See library reading list on North America.

Expression: The students will be required to model in sand the relief of the continent of North America and the different sections studied; to draw the same in relief on the blackboard and on paper; to make paintings and blackboard drawings of certain typical regions, as of the tropic plains, tropic mountain regions, and regions of Western United States and Mexico, Alaskan fjords and glaciers, northern and central plain, Appalachian region.

Besides discussions in class, the different committees will give illustrated talks on different parts of the country assigned for special study.

In what grade should continental study be introduced?

What kind of maps should be used at the beginning of geographic study?

How can a map be used to perform its function as a symbol?

Why do maps stand in the way of imaging the landscapes which they represent?

What laboratory experiments would aid in imaging North America?

What aspect of the country appeals most to younger pupils?

When should the physical geography of the continent be taught?

Correlation of German

Dr. Siegfried Benignus

It is generally acknowledged that the ideal method of studying German is to go to Germany, study under an experienced teacher, mingle with the educated part of the people, read newspapers, go frequently to the theatre, and attend public meetings and lectures. Since it is possible for only a few to use this best method, we must devise the means in our own environment to realize the most favorable conditions.

Many of the grammars used in school and private instruction are very faulty